

## Indiana Growth Model FAQ's

#### Q: What is a growth model?

A: A growth model is a statistical way to determine how much change in ISTEP+ scores is equal to one year of student learning. It answers the question "how much did a student learn in a school year?"

#### Q: How does Indiana's growth model work?

A: The Indiana Growth Model takes a student's ISTEP+ score in "year 1" and finds all other students in the state who got exactly that same score, say in math. Then we look at all of the "year 2" math scores for the same group of students and see how the student in which we are interested scored compared to the other students in the group. Growth is reported in percentiles.

#### Q: How much growth is good enough?

A: We classify student growth into three bands:

**High Growth** is from 66<sup>th</sup> to the 99<sup>th</sup> percentile, **Typical Growth** is from 35<sup>th</sup> to the 65<sup>th</sup> percentile, and **Low growth** is from 1<sup>st</sup> to the 34<sup>th</sup> percentile.

#### Q: When we are comparing students, to whom does the model compare "my" student?

A: The comparison group or "academic peer group" consists of ALL students with that same "Year 1" scale score in that grade level and for that subject—we look only at test performance (academic mastery) and not at any other variable.

#### Q: What test data is being be used to calculate growth?

A: Every student with both fall 2007 and fall 2008 scores will have a growth calculation. To the extent a student has scores from fall 2005 and 2006, those scores will also be included in the growth estimates.

## Q: What average score is used in determining the 50<sup>th</sup> percentile at building level, district, state?

A: The average is for all Indiana students in the same grade level and content area with that particular scale score, or the academic peer group.

#### Q: Are we comparing fall to fall data at this time?

A: Yes. The initial release will be based on the fall tests. IDOE is working to validate the model for the spring assessments and will add that information as soon as all the statistical work has been done.

#### Q: How do we account for high mobility rates for students?

A: Mobility does not affect the ability of the growth model to determine growth for a student. But we are using the PL221 logic (126 days of enrollment) before a student's growth is displayed as a part of the school or corporation growth estimate.

#### Q: Are there any plans to test below grade 3 eventually?

A: We have no plans to add an ISTEP-like test at the earlier grades, but we will explore the possibility of estimating growth from Wireless and Acuity.

### Q: Will growth model data be a part AYP?

A: Not this year. Indiana's growth model has not yet been approved for AYP use. IDOE we wants to get the model fully developed and implemented before submitting it for use in determining AYP.

#### Q: What two years of data will be included?

A: Any student with fall 2007 and fall 2008 scores will be included in growth calculations, but the program will use up to the most recent four years of data

#### Q: How can we get questions answered?

Questions can be emailed to growthmodel@doe.in.gov.

#### Q: How will the spring 2009 and fall 2009 data be compared since the test was changed?

A: This statistical tool can "look" across tests, since the expectation for any one student is based on how students with the same score in fall 2008 did in spring of 2009. We are still working with the fall 08 to spring 09 information, and we will include it as soon as it is available.

#### Q: How do you measure growth when you are at 99%?

A: Any student can theoretically have growth at the 99<sup>th</sup> percentile since it would be based on performance of that student compared to others like him/her.

# Q: Do the proficiency and growth bubbles contain the same students (i.e., those enrolled for 126 days)?

A: There is only one bubble that shows both achievement (proficiency) and growth for a content area. At the school level only those students enrolled for 126 days are included.

## Q: Were there any other conditioning factors for growth, other than having the same starting achievement?

A: No. Only the "year 1" scale score is used; all students in that grade with the same score are a part of the "academic peer" group.

#### Q: Are the student peer groups pulled from the state or the district?

A: State level data for that grade level, and content area is used to construct the academic peer groups

# Q: How does the DOE anticipate using this information? Will it be used for accreditation or to categorize schools and districts?

A: The most important use is to focus on which students have shown "typical" growth, low growth and high growth. In the same way that average school scores can mask gaps, we will now be able to see which students are making appropriate progress and which are not. IDOE has discussed the possible use of student growth in place of "Improvement" for PL 221 calculations.

# Q: Clarification: Does growth only contain two years of performance information? I know some models use as many years as are available.

A: This model will use up to four years of data where available.

# Q: So, if a student has 4 data points - 2 at one school and 2 at another, where do the scores go? A: At the school level, growth will always (only) be aggregated to the school where the student had 126 days of enrollment in the "current" school year. The individual student growth will be "visible" at the school of enrollment.